

AMENDED CLAIM SET:

1. (currently amended) A method for controlling manufacture of a sheet material cut into a plurality of sheets of predetermined size, in which the sheets or processed products of the sheets are manufactured by processing the sheets or performing predetermined operations on the processed products of the sheets at each of processing operations or processing sections provided at the processing operations while conveying the sheets along a predetermined line, the method comprising:

cutting the sheet material into the plurality of sheets of predetermined size;

detecting passage of the sheets or the processed products of the sheets by sheet detectors disposed at entrance and exit sides of each of the processing operations or the processing sections where the sheets or the processed products of the sheets enter and exit the processing operations or the processing sections; and

controlling conveyance or manufacture of the sheets or the processed products of the sheets based on results of detection by the sheet detectors, ~~and stopping conveyance of the sheets or the processed products of the sheets if passage of the sheets or the processed products of the sheets is not detected by the sheet detectors in the predetermined time,~~

wherein each of the processing operations or the processing sections comprises a branch path for sorting the sheets or the processed products of the sheets being conveyed, and the sheet detectors are disposed at an entrance side and exit sides of the branch path, and

wherein the controlling further comprises stopping conveyance or manufacture of the sheets or the processed products of the sheets if passage of the sheets or the processed products of the sheets is not detected by a sheet detector at one of the exit sides of the branch path toward which the sheets or the processed products of the sheets are conveyed, after a predetermined time after another sheet detector at the entrance side of the branch path detects the passage of the sheets or the processed products of the sheets.

2. - 5. (cancelled).

6. (currently amended) A method for controlling manufacture of a sheet material cut into a plurality of sheets of predetermined size applied to a manufacturing line including an operation section for performing a predetermined operation on the sheets while conveying the sheets along a predetermined conveyance path, the method comprising:

cutting the sheet material into the plurality of sheets of predetermined size;

detecting passage of the sheets by sheet detectors respectively disposed at entrance and exit sides of the operation section where the sheets enter and exit the operation section; and

controlling conveyance or manufacture of the sheets based on results of detection by the sheet detectors, ~~and stopping conveyance of the sheets if passage of the sheets is not detected by the sheet detectors in the predetermined time,~~

wherein the operation section comprises a branch path for sorting the sheets being conveyed, and the sheet detectors are disposed at an entrance side and exit sides of the branch path, and

wherein the controlling further comprises stopping conveyance or manufacture of the sheets if passage of the sheets is not detected by a sheet detector at one of the exit sides of the branch path toward which the sheets are conveyed, after a predetermined time after another sheet detector at the entrance side of the branch path detects the passage of the sheets.

7. (previously presented) The method according to claim 6, wherein the predetermined operation comprises sorting the sheets.

8. - 17. (cancelled).

18. (currently amended) A method for controlling manufacture of a sheet material cut into a plurality of sheets of predetermined size applied to a manufacturing line including an operation section for performing a predetermined operation on the sheets while conveying the sheets along a predetermined conveyance path, the method comprising:

cutting the sheet material into the plurality of sheets of predetermined size;

detecting passage of the sheets sheet detectors respectively disposed at entrance and exit sides of the operation section where the sheets enter and exit the operation section; and

controlling conveyance or manufacture of the sheets based on results of detection by the sheet detectors,

wherein the operation section includes a sorting section for sorting the sheets and conveying and collecting the sheets into different collection sections, the sorting section including a sheet conveyance path with at least one branch gate, the at least one branch gate operating so as to direct a sheet conveyed thereto to one of different paths therefrom;

sheet detectors are disposed at entrance and exit sides of the at least one branch gate for detecting a sheet that passes through or has passed through the at least one branch gate;

the controlling step includes determining a conveyance status of the sheet based on results of detection by the sheet detectors;

a determination is made as to whether or not any failure has occurred in at least one of conveyance and sorting of the sheets, and whether the failure occurs when a sheet detector disposed at one of the exit sides of the branch path toward which the sheet is conveyed does not detect the sheet in a predetermined time after another sheet detector disposed at the entrance side of the branch path detects the sheet; and

the manufacturing line is controlled so as to stop conveyance of the sheets based on [[a]] the determination of [[a]] the failure.

19. (cancelled).

20. (cancelled).

21. (currently amended) The method according to claim 18, wherein one of the collection sections is disposed, together with a counter for counting a number of the sheets collected at the respective collection section, at each of terminal ends of the branch paths,

the sheets being produced by cutting to predetermined lengths a long material wound in a roll,

the method further comprising calculating a number of produced sheets based on a length of the material drawn out from the roll,

and comparing a number of the sheets collected in the collection sections with the calculated number of produced sheets when conveyance of the sheets is stopped.

22. (previously presented) The method according to claim 18, wherein at least one of the paths branched from the at least one branch gate directs the sheet toward a next branch gate.

23. (cancelled).

24. (cancelled).

25. (cancelled).

26. (currently amended) The method according to claim 18, wherein at least one of wrapping and packaging the collected sheets is carried out to provide wrapped and/or packaged sheets, the method further comprising the steps of counting a number of sorted sheets and the numbers of at least one of the wrapped and packaged sheets, respectively, and comparing, ~~at a predetermined timing,~~ the number of sorted sheets and the number of the at least one of wrapped and packaged sheets when conveyance of the sheets is stopped.

27. (new) The method according to claim 1, further comprising:
calculating a number of the plurality of sheets into which the
sheet material is cut;

calculating a number of the sheets or the processed products
of the sheets at each of terminal ends of the branch path; and

comparing the number of the plurality of sheets and the number
of the sheets of the processed products of the sheets when
conveyance or manufacture of the sheets or the processed products
of the sheets is stopped.

28. (new) The method according to claim 6, further comprising:
calculating a number of the plurality of sheets into which the
sheet material is cut;

calculating a number of the sheets at each of terminal ends of
the branch path; and

comparing the number of the plurality of sheets and the number
of the sheets when conveyance or manufacture of the sheets is
stopped.